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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,862	11/26/2002	Edward Demarest	DSC-02043	3385

31661 7590 01/10/2005

PROTON ENERGY SYSTEM
10 TECHNOLOGY DRIVE
WALLINGFORD, CT 06492

EXAMINER

JACKSON, ANDRE K

ART UNIT	PAPER NUMBER
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2856

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/065,862

Applicant(s)

DEMAREST ET AL.

Examiner

André K. Jackson

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 8-12 is/are pending in the application.
- 4a) Of the above claim(s) 5-7 and 13-61 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 8-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 5-7, 17-19, 25-61 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim.

Applicant has elected the species of figure 5 and contends claims 1-4, 8-16 and 20-24 read on figure 5. However, claims 13-16 and 20-24 were not considered since the subject matter in those claims did not read on figure 5. For instance the claims require an electrochemical cell stack having an oxygen outlet and a first phase separator having an inlet and at least one outlet said inlet being connected to said cell stack oxygen outlet. Figure 5 does not show an electrochemical cell stack having an oxygen outlet and a first phase separator having an inlet and at least one outlet said inlet being connected to said cell stack oxygen outlet.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
3. Claim 1 and is rejected under 35 U.S.C. 103(a) as being unpatentable over the Prior art shown in figure 1 in view of Harada et al.

Regarding claim 1, the Prior art shown in figure 1 has a first separator (24), a second phase separator (28); a first combustible gas sensor (36) adjacent the second separator outlet and the first sensor being spaced a predetermined distance from the second separator outlet opening (Figure 1). The Prior art shown in figure 1 does not disclose where the second separator inlet is fluidly connected to the first separator outlet. However, Harada et al. disclose in the patent entitled "Hydrogen and oxygen gas generating system" where the second separator inlet is fluidly connected to the first separator outlet (connection (4) between (7A) and (32) Figure 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Prior art to include where the second separator inlet is fluidly connected to the first separator outlet. By adding this feature the apparatus would be able to fully measure the content of the gas.

4. Claims 2-4 and 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Prior art shown in figure 1 in view of Harada et al. and in further view of Whynall et al.

Regarding claim 2, the Prior art shown in figure 1 does not disclose an air movement device arranged to move air between the second separator outlet opening and the first sensor. However, Whynall et al. disclose in the patent entitled "Monitoring system" an air movement device (24) arranged to move air between the second separator outlet (30) opening and the first sensor (32). Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify the Prior art shown in figure 1 to include an air movement device arranged to move air between the second separator outlet opening and the first sensor. By adding this feature the apparatus would be able to advance the air for a more efficient measurement.

Regarding claim 3, the Prior art shown in figure 1 discloses where the sensor includes a sensing surface and is arranged where the sensor surface is perpendicular to the second separator (Figure 1).

Regarding claim 4, the Prior art shown in figure 1 does not disclose an air movement device arranged to move air in a direction parallel to the sensing surface. However, Whynall et al. disclose an air movement device arranged to move air in a direction parallel to the sensing surface. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Prior art shown in figure 1 to include an air movement device arranged to move air in a direction parallel to the sensing surface. By adding this feature the apparatus would be able to advance the air for a more efficient measurement.

Regarding claim 8, the Prior art discloses where the second separator outlet opening is separated from the second separator conduit (34).

Regarding claim 9, the Prior art discloses an orifice coupled to the conduit arranged between the second separator and the outlet opening (40).

Regarding claim 10, the Prior art discloses where the second phase separator includes a valve arranged to drain water from the second separator (30).

Regarding claim 11, the Prior art shown in figure 1 does not disclose where the orifice has an opening of less than 0.025 inches. However, it is considered a design choice and clearly within the purview of the skilled artisan to provide an orifice opening to accommodate the need of the instrument's size and pressure needs.

Regarding claim 12, the Prior art shown in figure 1 discloses a coalescing filter.

Response to Arguments

5. Applicant's arguments with respect to claims 1-4 and 8-12 have been considered but are moot in view of the new ground of rejection.
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to André K. Jackson whose telephone number is (571) 272-2196. The examiner can normally be reached on Mon.-Thurs. 7AM-4PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2856

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A.J.

January 5, 2005


HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800